

UNITED STATES PATENT APPLICATION

OF

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**TITLE: APPARATUS AND METHOD FOR LIFTING AND
SUPPORTING A UTENSIL COVER**

APPARATUS AND METHOD FOR LIFTING AND SUPPORTING A UTENSIL COVER

CROSS-REFERENCE TO RELATED APPLICATIONS

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This application is a continuation-in-part application of my prior application U.S. Ser. No. 10/322,016, filed on December 17, 2002, entitled "An Apparatus and Method for Lifting and Supporting a Utensil Cover".

10 FIELD OF THE INVENTION

The present invention relates in general to an apparatus made adaptable for use in lifting and supporting a cover typically made part of a combination cooking and food serving utensil such as a crock pot of the type commonly known in the art. More specifically, the present invention serves as means to efficiently and safely lift and support the cover from and over the cooking and food serving utensil in order to gain momentary access to comestible contents situated therein.

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BACKGROUND OF THE INVENTION

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Many homemakers as well as chefs utilize various utensils and appliances in the kitchen to assist in the preparation and service of food. A crock pot of the type commonly known in the art is an example of a combination kitchen utensil which purposefully cooks and warms food at a low temperature for a predetermined period of time. Given its desired capacity to slow cook and warm a modest amount of food, the crock pot is most notably used and observed at large gatherings, such as conferences, family meetings and so forth. To facilitate the cooking process and guard against heat-related injuries stemming from splattered foods, most cooking and food serving utensils comprise a top or cover made from glass or a semi-conductive material. The utensil

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cover, in most instances, is heavily weighted insofar to fit tightly atop a cylindrical-shaped, heat-equipped reservoir and is geometrically configured to resemble a dome or semi-flatten plate having a handle extending outwardly therefrom and integrally made part thereof.

5 During the cooking process as well as during moments of serving food, the homemaker or chef is periodically confronted with the requirement of removing the cover from the cooking and food serving utensil and locating a suitable location for the cover while one is gaining momentary access to the comestible contents. In order to alleviate this concern most effectively, the art provides for a range of cover handling devices. The
10 most simplistic device comprises a pot handling glove or pad having insulating characteristics, while the more advanced device comprises a pot and pan lid holder of the type that can simultaneously engage the cover's handle and sidewall of the cooking utensil, such as the one described in U.S. Pat. No. 5,683,010 issued to Boyajian, Jr. Although this type of handling device still requires one to directly interact with and
15 handle the cover, albeit at a modest level, it does facilitate placement of the cover about the utensil sidewall, thus suitably serving as a location for the cover.

 In accordance with the present invention, applicant has appreciably devised an apparatus comprising means for lifting a cover while at rest atop the cooking and food serving utensil and supporting the cover at an inclined position for a momentary period of
20 time insofar to gain access to the comestible contents, all of which can be accomplished without direct contact with the utensil cover.

BRIEF SUMMARY OF THE INVENTION

25 In order to overcome the numerous drawbacks apparent in the prior art, a utensil cover lift and support apparatus has been devised for use in residential and commercial food preparation and service settings.

It is thus an object of the present invention to provide a low cost, non-complicated utensil cover lift and support apparatus which may be reliably used in food preparation and service settings without undue modification of the cooking and food serving utensil.

5 It is another object of the present invention to provide such a utensil cover lift and support apparatus which affords one to access to the comestible contents in the cooking and food serving utensil without substantial interaction with and direct handling of the cover.

10 It is yet another object of the present invention to provide such a utensil cover lift and support apparatus which is capable of being washed and cleaned to the likes of other cooking utensils often used in a kitchen setting.

It is another object of the present invention to provide such a utensil cover lift and support apparatus which possesses the capacity to conform to a variety of cooking and food serving utensil shapes and configurations.

15 It is yet another object of the present invention to provide such a utensil cover lift and support apparatus which permits the return of condensed comestible contents collected on the cover back into the cooking and food serving utensil.

It is yet another object of the present invention to provide such a utensil cover lift and support apparatus which incorporates detachable means for easy removal from the cooking and food serving utensil.

20 It is yet another object of the present invention to provide such a utensil cover lift and support apparatus which accomplishes the foregoing and other objects and advantages and which is economical, durable, and fully effective in performing its intended functions.

25 In accordance with the present invention, a utensil cover lift and support apparatus has been devised for use with a cooking and food serving utensil generally present in a food preparation and service setting, the utensil cover lift and support apparatus comprising in combination a support fork assembly having a latch mechanism pivotally attached to a pair of elongate arms and a vertical support member selectively situated in between the two elongate arms and pivotally connected thereto and having an adjustable

support block slidably connected thereto for engaging an outer lip made part of the cooking and food serving utensil, a lid bracket slidably mounted to the elongate arms and having at least two outwardly extending flanges integrally connected to a top plate situated therebetween, each of the outwardly extending flanges having a suction cup
5 mounted to an undersurface thereof for engaging a utensil cover, and at least two suction cups mounted to the vertical support member to engage a sidewall of the cooking and food serving utensil, collectively serving to secure the utensil cover lift and support apparatus to the cooking and food serving utensil insofar to allow lifting and supporting of the cover to gain momentary access to comestible contents residing within the cooking
10 and food serving utensil for completion of tasks of food preparation and service.

Other objects, features, and advantages of the present invention will become apparent in the following detailed description of the preferred embodiments thereof when read in conjunction with the accompanying drawings in which like reference numerals depict the same parts in the various views.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

A preferred embodiment of the present invention will now be described by way of example with reference to the accompanying drawings, in which:

20 FIG. 1 is a side elevational view of a preferred embodiment of the present invention illustrating a fork support assembly in an upright position and engaging a top end of a vertical support member;

FIG. 2 is a partial front elevational view of the preferred embodiment of the present invention illustrating a fork support assembly in an upright position and engaging
25 a top end of a vertical support member;

FIG. 3 is a side cross sectional view of the preferred embodiment of the present invention taken on line 3—3 of FIG. 2 illustrating a fork support assembly in an upright position and engaging a top end of a vertical support member;

FIG. 4 is a side elevational view of the preferred embodiment of the present invention illustrating a latch mechanism disengaged from a vertical support member and a pair of elongate arms extending horizontal and parallel to axis P;

FIG. 5 is a front perspective view of the preferred embodiment of the present invention illustrating a lid bracket; and

FIG. 6 is a perspective view of the preferred embodiment of the present invention illustrating a vertical support member attached to a cooking and food serving utensil and supporting a cover in an upright, incline orientation.

10 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

While this invention is susceptible of being embodied in many different forms, the preferred embodiment of the invention is illustrated in the accompanying drawings and described in detail hereinafter with the understanding that the present disclosure is to be considered to exemplify the principles of the present invention and is not intended to limit the invention to the embodiments illustrated and presented herein. The present invention has particular utility as an apparatus for lifting a cover from a cooking and food serving utensil while at rest thereon in order to gain access to comestible contents residing therein and supporting the cover for a momentary period of time until which time the cooking or serving task is complete.

Referring now to FIG. 1, there is shown generally at 10 a utensil cover lift and support apparatus comprising a support fork assembly 12 having a latch mechanism 14 and a pair of elongate arms 16, 18 each being pivotally fastened to a vertical support member 20 and engaging a portion of the latch mechanism. In the preferred embodiment, each elongate arm 16, 18 comprises first and second ends 16a, 18a, 16b, 18b and at least three apertures (referred hereinafter as primary 16c, 18c, secondary 16d, 18d and tertiary 16e, 18e apertures) extending therethrough to permit passage of an equivalent number of fasteners 22a, 22b, 22c for holding together the elongate arms in a parallel arrangement and supporting the latch mechanism 14. Preferably, each fastener comprises a bolt 24

having a nut 26 threadably attached thereto which collectively serve to simplify construction of the support fork assembly. Although not explicitly stated herein, other fasteners of the type commonly known in the art may equally accomplish the same objective of holding together the elongate arms, such as an equivalent number of rivets by way of example. The primary aperture 16c, 18c of each elongate arm 16, 18 is preferably positioned at the second end 16b, 18b and primarily serves as the location for fastening each of the elongate arms to the vertical support member 20. As shown in FIGS. 2 and 3, the vertical support member comprises an aperture 28 having an equivalent diameter to that of the primary aperture and is positionally aligned therewith to permit passage of one of three bolts 22a used in the support fork assembly 12. Preferably, the vertical support member's aperture is located approximately one-third the distance from a top end 30 of the vertical support member in order to allow freedom of movement as the latch mechanism moves along path M, as shown in FIG. 4.

Referring now to FIGS. 2 and 3, the support fork assembly 12 further comprises an arm spacer 32 having a bore 34 extending lengthwise thereabout, with the bore having a diameter substantially equivalent to the diameter of the secondary aperture 16d, 18d of the elongate arm 16, 18. The arm spacer most notably assists in retaining the parallel positioning of each of the elongate arms 16, 18 and acts as a brace and catch for resting thereon a portion of the latch mechanism 14 while the latch mechanism is pivotally positioned away from the top end 30 of the vertical support member. In assembled form, the bore 34 of the arm spacer 32 is configurably positioned perpendicular to the latch mechanism and elongate arms and aligned with the secondary aperture 16d, 18d of each of the elongate arms to permit passage of a second fastener 22b of the three used for the support fork assembly 12, as best illustrated in FIG. 2.

The latch mechanism, as shown in FIG. 3, comprises a flatten plate 36 having four sides 38a, 38b, 38c, 38d and an aperture 40 extending therethrough for receiving a third fastener 22c of the three used for the support fork assembly 12. In the preferred embodiment, the first side 38a comprises a handle 42 extending outwardly therefrom in a perpendicular fashion and primarily serves as means to swing back-and-forth the latch

mechanism 14 about a pivot point 44 primarily established at the aperture 40 located at and near the second side 38*b*. To maintain central positioning of the latch mechanism about the vertical support member 20 and in between the elongate arms to prevent frictional engagement therewith, the pivot point 44 comprises a pair of latch spacers 46 each having an elongate bore 48 extending lengthwise thereabout. As shown in FIG. 2, each arm spacer is adaptably fitted perpendicular to each side of the latch mechanism at and near the pivot point and positionally aligned with the latch mechanism's aperture 40 and the tertiary aperture 16*e*, 18*e* of each of the elongate arms 16, 18 insofar to permit passage of the third fastener 22*c* and establish the means by which the latch mechanism swingably moves and pivots about the pivot point 44. Located at and along the second side 38*b* of the latch mechanism is an angular edge 50 commencing at and near the aperture 40 and terminating at the third side 38*c* of the flatten plate 36, as best depicted in FIG. 1. The angular edge is geometrically configured to allow the latch mechanism to clear the arm spacer 32 for pivotal movement thereof and prevent the cover of the cooking and food serving utensil from interfering with the functioning of the latch mechanism 14, particularly during activities of lifting and supporting. The third side 38*c* of the latch mechanism comprises a cutout 52 having an abutting end 54 and a geometric configuration substantially corresponding to that of the top end 30 of the vertical support member 20, namely one that is rectangular in shape but proportionally sized to permit the first and second sides 38*a*, 38*c* of the latch mechanism to be substantially positioned parallel to a horizontal axis P, as illustrated in FIG. 1. Preferably upon engaging the latch mechanism 14 with that of the vertical support member, the abutting end 54 substantially mates with the top end, with the handle 42 being upwardly extended, generally in parallel alignment with the longitudinal axis of the vertical support member 20. This positioning is most notably apparent during use of the utensil cover lift and support apparatus 10 whereby the cover of the cooking and food serving utensil and elongate arms are collectively positioned at an incline, approximately 45° to horizontal axis P noted in FIG. 1. Conversely, the latch mechanism 14 upon release from the top end 30 will principally position the elongate arms 16, 18 in a perpendicular arrangement with that of the vertical

support member 20, with the handle being outwardly positioned to extend away therefrom, as shown in FIG. 4. Similar to the second side 38*b*, the fourth side 38*d* of the flatten plate comprises a second angular edge 56 which commences at a point 58 substantially positioned along the fourth side and across from the aperture 40 of the latch mechanism and terminates at the third side 38*c* to form a protruding member 60 having one side 62 in common with that of the cutout 52.

As means for handling the support fork assembly to ease lifting of the utensil cover from an at-rest position atop the cooking and food serving utensil, the elongate arms 16, 18 are adaptably fitted with a D-shaped ring 64 having two inwardly protruding ends 64*a*, 64*b*. Each protruding end is slidably situated in a depression 66*a*, 66*b* extending inwardly partway into each elongate arm to permit pivotal movement of the D-shaped ring thereabout. As depicted in FIG. 4, each depression is preferably located near the first end 16*a*, 18*a* of the elongate arm which suitably places the D-shaped ring in a position to gain the maximum amount of leverage needed to sufficiently lift the cover and place it in a supporting incline position. In addition to the presence of the D-shaped ring, the support fork assembly 12 further comprises means for mounting a utensil cover 68 to the elongate arms. As illustrated in FIG. 5, mounting means preferably comprises a lid bracket 70 having at least two outwardly extending flanges 72 integrally connected to a top plate 74 situated therebetween. Each extending flange comprises an undersurface 76 and a threaded aperture 78 for threadably receiving therethrough a threaded post 80 suitably made part of a suction cup 82 of the type readily known in the art to adhere to smooth, flat surfaces. Accordingly, each suction cup is fabricated from a rubberized material suitably possessing pliable characteristics to conform to the geometric contours of the utensil cover 68 insofar to ensure complete contact and adhesion thereto, particularly required during lifting and supporting of the utensil cover. As depicted in FIG. 5, each suction cup is situated at the undersurface of the extending flange, preferably positioned at the outer extremity of the lid bracket 70. To further ensure that the utensil cover is well supported during episodes of lifting and stationary positioning, the lid bracket is preferably mounted to the utensil cover along the diametric axis or

width thereof and comprises a predetermined length to allow the suction cups to fully engage and adhere to the utensil cover's exterior top surface. Although the lid bracket comprises a geometric configuration which accommodates most utensil cover shapes and contours, there may be instances where a shortened lid mount is most appropriate to ensure complete adhesion of the suction cups to the utensil cover, particularly a utensil cover comprising a smaller diameter and/or possessing substantial curvature. In other instances, the utensil cover's features, such as the handle or its height, may further limit proper placement of the lid bracket. In this instance, the extending flanges 72 may be distanced farther from the top plate to accommodate any notable obstruction to ensure that each of the suction cups engages the utensil cover. In limited applications, the extending flanges may be bent downwardly from the top plate 74 to increase the distance thereinbetween and angular orientation to correspond more appropriately with the contours of the utensil cover and accommodate the utensil cover's noted features. As shown in FIG. 5, a knob 84 having a threaded stem 86 fitted with a washer 88 and threadably inserted into a threaded aperture 90 extending through the top plate collectively serve as means for mounting the lid bracket to the elongate arms. To further this function, the washer preferably comprises an outer effective diameter substantially capable of bridging across the elongate arms 16, 18 and resting atop thereof without dropping down into and through the space formed by the parallel arrangement of the elongate arms. In addition to serving as means for mounting the lid bracket to the elongate arms, the knob further serves as a handling device and when cooperating with the functionality of the washer, the lid bracket can be slidably positioned about the support fork assembly 12 to accommodate a utensil cover having a differing diametric dimension.

Referring now to FIG. 1, the vertical support member 20 further comprises means for attaching the utensil cover lift and support apparatus 10 to the cooking and food serving utensil insofar to accommodate the objectives stated herein, namely lifting and supporting the cover without direct contact therewith. Preferably, attaching means comprises at least two suction cups 92 and an adjustable support block 94, collectively

configured to allow the vertical support member 20 to be situated alongside a sidewall 96 of the cooking and food serving utensil. The adjustable support block principally serves as means to prevent the vertical support member 20 from slipping downwardly as the support fork assembly 12 lifts and supports the cover of the cooking and food serving utensil. In order to accommodate the geometric configuration of the cooking and food serving utensil, most notably relating to the height thereof, the adjustable support block 94 comprises means for incremental adjustment about the vertical support member, namely a slot 98 extending lengthwise thereabout and a screw 100 threadably fitted therethrough to adaptably affix the support block to the vertical support member 20 at a predetermined location. Preferably, the support block is fastened to an inner facing side 102 of the vertical support member, specifically being mounted in such a fashion to extend outwardly therefrom and inward toward the centroid of the cooking and food serving utensil as shown in FIG. 6. Once the vertical support member is positionally placed near the sidewall of the cooking and food serving utensil insofar to allow a bottom portion 104 of the support block to engage an outer lip 106 extending circumferentially about the cooking and food serving utensil, the utensil cover lift and support apparatus 10 is prevented from moving downwardly along the longitudinal axis of the vertical support member. As illustrated in FIG. 6, each suction cup equally serve to secure the vertical support member 20 to the cooking and food serving utensil, most notably in preventing outward lateral movement of the utensil cover lift and support apparatus 10 from the sidewall of the cooking and food serving utensil. Like previously discussed for use with the lid bracket, each suction cup is fabricated from a pliable-rubberized material substantially capable of conforming to the sidewall of the cooking and food serving utensil. As depicted in FIG. 3, each suction cup is preferably mounted to the inner facing side 102 of the vertical support member using a threaded post 108 having one end 110 extending into a base 112 of the suction cup and a second end 114 threadably inserted into the vertical support member. In an alternative arrangement, one in which accommodates a larger than normal cooking and food serving utensil, the vertical support

member may be fitted with more than two suction cups spatially positioned therealong to adhere to the sidewall 96 of the cooking and food serving utensil.

In operation, the utensil cover lift and support apparatus 10 is first configurably prepared for mounting on the cooking and food serving utensil. As illustrated in FIG. 4, the latch mechanism 14 is cocked forward insofar to disengage the cutout 52 from and top end 30 and clear the vertical support member 20. With the support fork assembly 12 positioned over the utensil cover, the lid bracket 70 is suitably placed within the approximate center of the utensil cover and pushed downwardly to allow each of the suction cups to sit flush and engage an exterior top surface 116 of the utensil cover 68. It is noted herein that the utensil cover lift and support apparatus 10 may be used with or without a utensil cover having a handle attached thereto, particularly of the type commonly associated with cooking utensils. After mounting the lid bracket to the utensil cover, the lid bracket is loosened from the elongate arms through manipulation of the knob and moved accordingly to accommodate the diametric dimensions of the utensil cover while providing adequate clearance for moving the vertical support member downwardly toward the sidewall of the cooking and food serving utensil. Once adequate clearance is notably apparent, the vertical support member 20 is further moved inward toward the sidewall of the cooking and food serving utensil to permit each of the suction cups 92 attached to the vertical support member to sit flush and engage therewith. After noting attachment of the utensil cover lift and support apparatus 10 to the cooking and food serving utensil, the D-shaped ring 64 is grasped and lifted upwardly therewith, particularly along path M noted in FIG. 4, until the latch mechanism 14 is within vicinity of the vertical support member. The cutout 52 is then configurably positioned atop the vertical support member 20 to permit the abutting end 54 to mate and engage with the top end 30 thereof.

It can be seen from the foregoing that there is provided in accordance with this invention a simple and easily operated device, which is particularly suitable for lifting and supporting a cover generally made part of the cooking and food serving utensil.

The utensil cover lift and support apparatus 10 is completely functional in a variety of food preparation and service settings where periodic access to the comestible contents residing within the cooking and food serving utensil is required to complete tasks of food preparation and service and where space is limited for situating the cover nearby. It is
5 obvious that the components comprising the utensil cover lift and support apparatus 10 may be fabricated from a variety of materials, providing such selection or use of materials possess the capacity to withstand forces acting thereon throughout its duration of use in a food preparation and service setting and withstand a moderate elevated temperature generally encountered during food preparation. Accordingly, it is most
10 desirable, and therefore preferred, to construct the support fork assembly 12 and vertical support member 20 from a rigid material such as acrylic, Teflon[®], nylon or polycarbonate, to name a few most readily available in the art. Aluminum, steel or an equivalent material possessing deformable characteristics while retaining strength collectively serve as suitable material types to construct the lid bracket 70 to ensure
15 sustained and reliable use of the utensil cover lift and support apparatus 10.

While there has been shown and described a particular embodiment of the invention, it will be obvious to those skilled in the art that various changes and alterations can be made therein without departing from the invention and, therefore, it is aimed in the appended claims to cover all such changes and alterations which fall within the true
20 spirit and scope of the invention.